

11. What are the benefits of TAOS 9.0 for MultiVoice?

The "Universal Port" feature uses the same DSP for voice or data on a call-by-call basis, which allows you to use the APX 8000 and MAX TNT products as multiservice platforms. Lucent is the first to offer Universal Port capability on platforms with multiple DS3 capacity. Multiservice networks provide the key to reduced costs, and are targeted to provide network service providers with a common platform that they can use for transparent integration of voice, fax, and modem services in an existing or new carrier infrastructure.

Other benefits include the ability to sell multiservice capability on a single platform into lucrative calling card, dial-around, and long distance markets. MultiVoice can now be deployed—where, until now, a Class 4 tandem switch was required—to trunk long-distance (LD) calls in intra-LATA or interLATA switching environments. Supported applications include residential I+LD and 1010 dial-around services. This new MultiVoice functionality enables any Internet service provider (ISP) to offer telephony services in the \$87 billion North American market for long-distance services.

12. When will TAOS 9.0 be available?

TAOS 9.0 is available now. You can download the software from the following URLs:

MAX TNT: <http://ftp.ascend.com/pub/Software-Releases/MaxTNT/>

APX 8000: <http://ftp.ascend.com/pub/Software-Releases/APX/>

13. Does TAOS 9.0 for MultiVoice operate with Lucent Softswitch and what type of applications does it support?

Yes, TAOS 9.0 does interoperate with Lucent Softswitch 2.x, 3.0, and above.

The initial application of Lucent Softswitch 3.0 is to replace the toll/tandem (class-4) switches and to offer VoIP connectivity. Lucent Softswitch controls trunking gateways like the MAX-TNT and APX-8000, which convert circuit trunks to VoIP packets. Lucent Softswitch receives the SS7 signaling from the PSTN by an embedded SS7-Gateway and performs call control functions. This solution allows operators to replace existing toll/tandem exchanges with a Lucent Softswitch + gateway combination distributed in a network. Being a flexible signaling infrastructure, Lucent Softswitch offers voice over packet connectivity with a variety of technologies.

Another application includes Internet Call Diversion (ICD) which diverts Internet dial-up data traffic directly to the data packet network to alleviate congestion on the circuit based PSTN. This application has been the driving force behind the evolution of gateways we know today and has accelerated the clarification of the Lucent Softswitch architecture by separating payload and call control. For further information on Lucent's Softswitch product go to

<http://www.lucent-ssg.com/ons/softswitch/>

Does NavisAccess™ v5.0 support TAOS 9.0 for MultiVoice?

Yes, with Navis™ 5.0 and MultiVoice, you can use the VoIP gateway Management Information Base and call logging to manage the VoIP network and application. You can map VoIP calls based on DNIS and Trunk Group and monitor VoIP services in real-time using NAVIS AccessWatch. You can also monitor physical resources including DSPs, slot cards, and modems and base fault, performance and event monitoring on VoIP statistics—jitter, delay/latency, and call rates. You can purchase the NavisAccess management platform separately.

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14. How can I purchase the TAOS 9.0 and where can I get additional information?

You may purchase the MultiVoice TAOS 9.0 for the APX 8000 and MAX TNT platforms via the standard MAX distribution channels including the following:

- Distributors
- Value-added reseller (VAR) channels
- Direct from Lucent

For more information, please call Lucent in the U.S. at 1.800.621.9578 or visit our Web site at <http://www.lucent.com/ins/products/multivoice>.

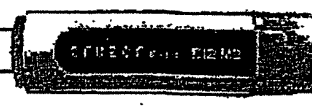
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Lucent MAX TNT (TNT-2DC-H) Remote Access Server - Find, Compare, and Buy Lucent MA... Page 1 of 3

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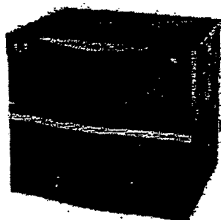
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Read product information for the Lucent MAX TNT (TNT-2DC-H) Remote Access Server

This product is currently not available for purchase at any of the stores we search.



The MAX TNT multiprotocol WAN access switch enables carriers, ISPs, corporations, and major network providers to offer a variety of access services such as analog, ISDN, leased T1/E1, and frame relay. Because the MAX TNT is the highest-density product in its class, it dramatically reduces rack space requirements while driving down the price per port. The MAX TNT has a scalable, modular card and backplane architecture that provides intelligent access for applications to global network services. The modular card system lets users design a solution that

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Lucent MAX TNT (TNT-2DC-H) Remote Access Server - Find, Compare, and Buy Lucent MA... Page 2 of 3

satisfies the
specific
application and
bandwidth
requirements
of any
customer.

Key Features

Connectivity	Cable
Platform	PC
Protocols	
Data Link Protocol	Fast Ethernet, Ethernet
Remote Management Protocol	SNMP
Transport Protocol	TCP/IP
Other Features	
Modules Qty.	0
Package Qty.	1
Dimensions	
Width	17.41 in.
Depth	11.5 in.
Height	14.03 in.
Weight	130.1 lb.
Miscellaneous	
MPN	TNT-2DC-H
Product ID	20205182

Additional resources

ISPs: Upgrade to V.92

Get a new V.92 and V.44 RAS Patton buys your old RAS for cash!
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MyWebExPC (Official Site)

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www.mywebexpc.com

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Read product information for the Lucent (TNT-SL-48MODV3-S-C) Modem



Each Series56 Digital Modem module supports both analog and cellular connections at speeds up to 56 Kbps. It has 48-port Digital Modems (DM48) and occupies two expansion slots on the MAX TNT. Remote users with a modem and an analog or cellular line can dial into the MAX TNT over T1, DS3 or T1/E1/PRI lines.

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Key Features

Type	Modem (Digital)
Max. Transfer Rate	56 Kbps
Connectivity Technology	Wired
Platform	PC
Protocols	ITU V.34, ITU V.32bis, ITU V.32, ITU V.17, ITU V.22bis, ITU V.29, ITU V.22, ITU V.90, ITU V.27ter, ITU V.21, ITU V.23, Bell 212A, Bell 103, K56Flex, ITU V.34bis, ITU V.33, Bell 212
Analog Modulation	

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http://pcmag.shopping.com/xPF-Lucent_TNT_SL_48MODV3_S_C

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PC Magazine: Product Features for the Lucent (TNT-SL-48MODV3-S-C) Modem

Page 2 of 3

Error Correction	ITU V.42, MNP-4, MNP-3, MNP-2, MNP-10, MNP-10EC
Data Compression	ITU V.42bis, MNP-5
Digital Signaling	ISDN PRI
Other Features	
Max. Fax Transfer Rate	14.4 Kbps
56K Technology	V.90, K56Flex
Dimensions	
Depth	1.62 in.
Height	8.67 in.
Width	10.99 in.
Miscellaneous	
Package Qty.	1
MPN	TNT-SL-48MODV3-S-C
Product ID	20163035

Additional resources

Comcast High-Speed

Internet. 1st 6 mos for \$19.99 Free Modem & \$50 Cash Back!
www.comcastoffers.com

Modem Blaster V.92 PCI

With Speakerphone Networking at Dell
www.dell4me.com

Modems at Staples

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PC Magazine: Product Features for the Lucent (TNT-SL-HDLC2) Expansion Module

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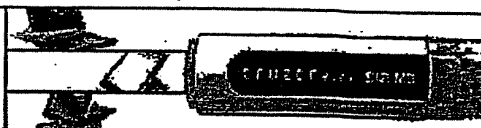
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Read product information for the Lucent (TNT-SL-HDLC2) Expansion Module

This HDLC slot card has identical functionality to TNT-SL-HDLC2 with hardware support for encryption included (requires software option for encryption).

- > [See product details](#)
- > [Write a review at Epinions.com](#)



Key Features

Form Factor	Plug-In Module
Interface	Expansion Slot
Connectivity	Cable
Other Features	
Package Qty.	1
Miscellaneous	
MPN	tnt-sl-hdlc2
UPC	000001224689
Product ID	22208116

Additional resources

D/Dock Expansion Station
 or Select Dell Latitude Dell
www.dell4me.com

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Lucent (TNT-SL-CT1) Expansion Module - Find, Compare, and Buy Lucent (TNT-SL-CT1) Ex... Page 1 of 3



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Lucent gives its customers a unique opportunity to configure their network equipment the way they want it to be. By providing various network modules, Lucent satisfies the needs of most demanding users and guarantees that its modules are fully compatible with their parent systems and deliver outstanding results.

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Key Features

Data Transfer Rate

1.5 Mbps

Form Factor

Plug-In Module

Connectivity

Cable

Cabling Type

Network

Platform

PC

Other Features

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Lucent (TNT-SL-CT1) Expansion Module - Find, Compare, and Buy Lucent (TNT-SL-CT1) Ex... Page 2 of 3

Package Qty.	1
Miscellaneous	
MPN	TNT-SL-CT1
Product ID	20619944

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www.Staples.com

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ebay.com

Kit [Expansion Module]

Matrix/Stacking Module Network- Modules at DirectDial
www.DirectDial.com

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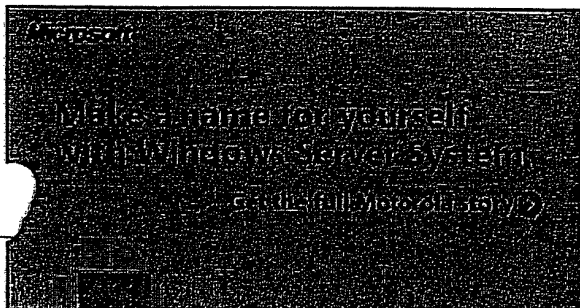
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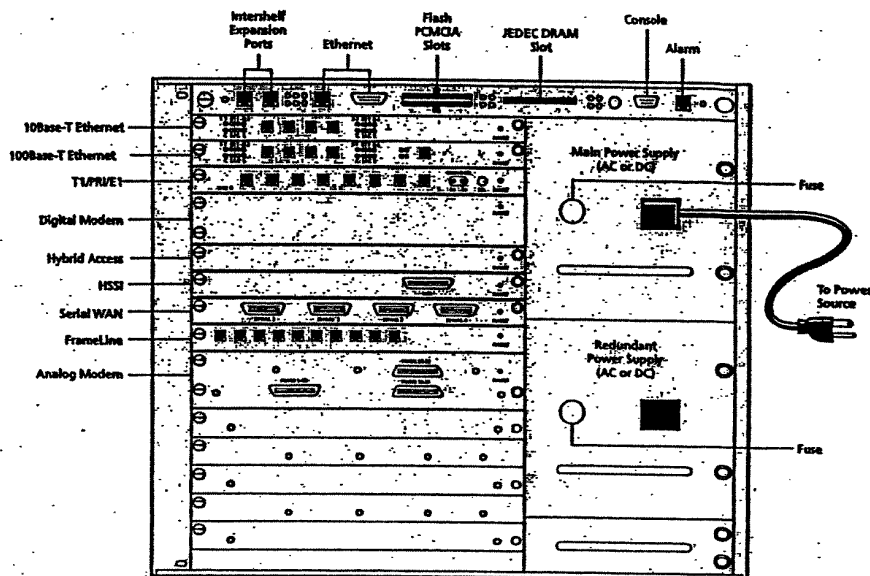


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4/13/2005

MAX TNT Back Panel Options**Hardware Specifications****Height**

14 in. x 17.4 in. x 11.5 in.
(35.6 cm x 44.2 cm x 29.2 cm)

Weight

130 lbs., with 672 modems (single power supply)
27.2 lbs. empty (no power supplies)

LAN Interface

Ethernet 10 BaseT, 100 BaseT

WAN Interfaces

DS3, T1/E1, Serial (V.35, RS449, X.21)

ATM DS3, STM-0 for Japan only

Software Upgrade

Via built-in flash RAM, remote downloadable

Power Requirements

950 watts, 47-63 Hz, 90-240 VAC,
-40 to +60 VDC

Operating Requirements**Temperature:**

32-104°F (0-40°C)

Altitude:

0-14,800 ft. (0-4500 meters)

Relative Humidity:

0-90% (noncondensing)

Safety Certifications

CSA 950, NRTL/UL 1950,

TUV EN 60 950

EMI/RF

FCC Part 68, FCC Part 15, E55081-1,

N50082-1, EN55022

Software Specifications**Network Protocols Supported**

TCP/IP

Routing Protocols Supported

RIP, RIP2, OSPF, IGMP multicast forwarding

LAN Protocols Supported

Ethernet 10 BaseT, 100 BaseT

WAN Protocols Supported

PPP, ARAE, SLIP, C-SLIP, Async PPP, Sync PPP, HDLC, ARA, X.25 PAD, X.25 over B-channel, V.120, D4 framing (T1/E1), G703/732 framing (R1), R2, frame relay PVC, Hybrid Access, PPP-FR gateway, FR NNI, ATM (UNI and NNI)

VoIP Protocols Supported

H.323, IPDC

Modem

V.90, K56flex, V.34, MNPS, V.42bis, fax modem send up to 14.4 Kbps

Bandwidth Management

Multilink PPP, Multilink Protocol Plus, TCP header compression, data compression Lucent

/Microsoft/STAC V9)

Security

Lucent NavisRadius, PAP, CHAP, token card, CLID, packet filtering, SNMP, console management (VT-100), PPP callback, user authentication

Management

NavisAccess network management, console management software (runs on Windows 95 and Windows 3.x) Telnet, NASL, SNMP II, PPP LQM, frame relay ITU Annex A, frame relay ANSI

Annex D**Client Software**

IntrayAccess software

DeskDial client software

To learn more, contact your Lucent Technologies Representative, Authorized Reseller, or Sales Agent. Or, visit our Web site, www.lucent.com

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Jeff Saltzberg

From: Shoeb Siraj [shoeb.siraj@mci.com]
Sent: Wednesday, February 09, 2005 7:17 AM
To: 'Jeff Saltzberg'
Cc: Nancy.S.McCarty@mci.com; John.Anderson@mci.com
Subject: FW: DAN Platform

Jeff:

Response from the Director of Engineering at Lucent.

Thanks,

~Shoeb.

-----Original Message-----

From: Don Krause [mailto:dk@lucent.com]
Sent: February 08, 2005
To: Shoeb Siraj
Subject: RE: DAN Platform

Hi Shoeb,

I'm having a hard time finding any Marketing literature on the CSM cards. This literature would have been generated in the 1999-2000 timeframe and it no longer seems to be available.

Nonetheless, the two modem cards are Conexant based modem cards. Support for these cards ends with 10.1. They support modem protocols up to and including V.90, but do not support V.92. Voice is not supported on either of these cards.

The HDLC card terminates HDLC sessions over ISDN calls. In addition, it can be used in Frame Relay applications. This card is still supported. Please refer to our release notes for the details on the applications of these cards.

Release notes can be found at:

http://www.lucent.com/products/releaselist/comp/listing/1,,S0ID+1334-LOCL+1-DOC_ID+111-PNUM+1-PGID+0-ORIG+s,00.html

Thanks, Don

Don Krause Lucent Technologies <http://www.lucent.com/ins>
mailto:dk@lucent.com Voice: 510.747.6793 FAX: 510.747.5411
Mobile: 510.552.6573 Pager: mailto:5105526573@vtext.com

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EXHIBIT D



U.S. Department of Justice

United States Attorney
Southern District of New York

86 Chambers Street, 3rd Floor
New York, New York 10007

February 14, 2005

BY EMAIL AND MAIL

James Grogan
Weil Gotshal & Manges, LLP
700 Louisiana St, Ste. 1600
Houston, Texas 77002

Re: In re WorldCom, 02-13533 (AJG)

Dear Mr. Grogan:

We write concerning the Reorganized Debtors' Objection to Proof of Claim No. 38365 (the "Objection"), filed on August 5, 2004. The IRS's Proof of Claim relates to excise tax claims incurred by debtor UUNET.

As we have discussed, we believe it would be useful for MCI and UUNET informally to provide documents to the IRS to see if there is a way to reach resolution of this claim without Court intervention. Accordingly, we have put together the following list as our initial informal document request. We may seek additional documents hereafter.

For all the documents sought below, the relevant time frame is the fourth quarter of 2002 through the present. (The tax periods identified in Proof of Claim No. 38365 are the fourth quarter of 2002, all four quarters of 2003, the first quarter of 2004, and some of the second quarter of 2004, but since this is post-petition, ongoing claim, we believe it makes sense to include in our request all documents through today, and would ask MCI and UUNET to consider this request as an ongoing request for updated information).

The IRS requests that MCI and UUNET provide the following documents:

1. All billing invoices relating to network services and communications services provided by UUNET.
2. All billing invoices relating to network services and communications services purchased by UUNET or to which UUNET subscribed.
3. All contracts and/or tariffs governing network services and communications services provided by UUNET, including all contracts between (a) UUNET and its customers;

James Grogan
February 14, 2005
Page 2

(b) UUNET and its suppliers; and (c) UUNET and its communications providers.

4. All documents concerning the network architecture and/or system topology of UUNET's systems, including its COBRA-based systems, including but not limited to blueprints, diagrams, schematics or other descriptive documents.

5. All documents reflecting what transmission lines are used by UUNET to connect their network services to customers and suppliers, and how those transmission lines are used.

6. All documents concerning the specifications for the equipment used by UUNET.

7. All promotional materials produced or used by UUNET describing the functions and capacities of its communications systems.

8. All promotional materials received by UUNET from suppliers describing the functions and capacities of its communications systems.

The Government makes these requests as part of informal discussions between MCI, UUNET and the IRS, pursuant to Federal Rule of Evidence 408. In doing so, the Government does not waive, and expressly hereby reserves, its right to engage in all aspects of formal litigation, including motion practice, discovery, and trial, should the parties' informal efforts fail to achieve resolution of this claim.

Please let us know when MCI and UUNET will be able to provide us with responsive materials.

Sincerely yours,

DAVID N. KELLEY
United States Attorney

By:

DANNA DRORI
NICOLE GUERON
Assistant United States Attorneys
Telephone: (212) 637-2699; 637-2689
Facsimile: (212) 637-2686

EXHIBIT E

Tutorial on methods of dial-up access to ISPs

I. The components of a dial-up connection - a tutorial

1. The structure of a dial-up connection has evolved over the years in order to take economic advantage of new services and pricing structures. Nonetheless, all the techniques described below share the common feature that a dial-up customer connected to Public Switched Telephone Network (PSTN) can establish a telephonic quality connection with a Modem or Digital Signal Processor serving the Internet Service Provider (ISP).
2. A Modem is a device which converts digital information to a telephonic quality voice signal and vice versa. A Digital Signal Processor converts digital representations of telephonic quality voice signals to alternative digital representation and vice versa. In the applications described in this tutorial, the alternative digital representations are typically in a format using Internet Protocol (IP)

Basic connection

3. The basic connection is shown in Figure 1

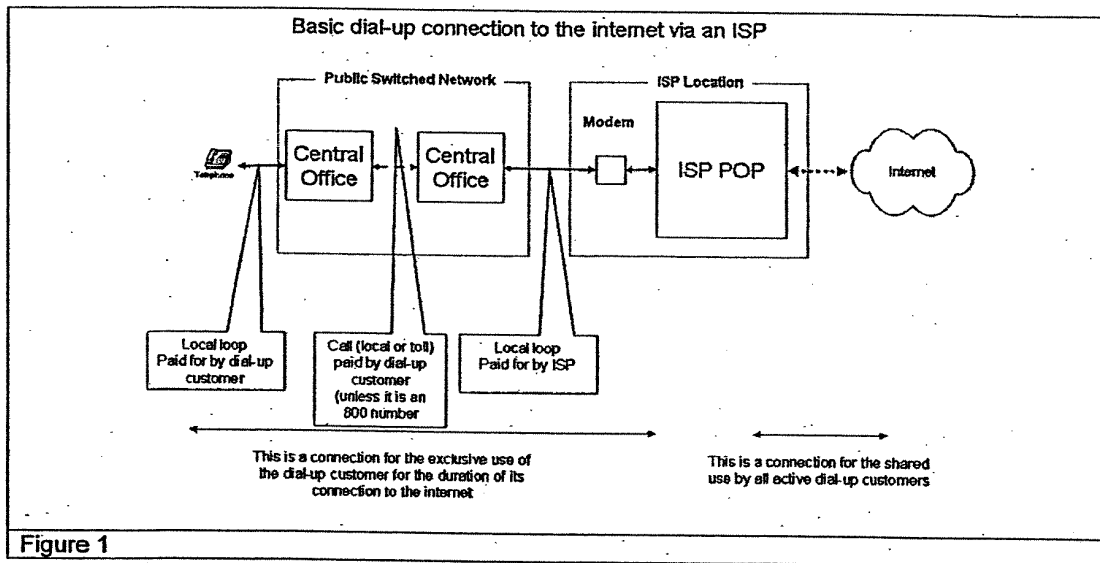
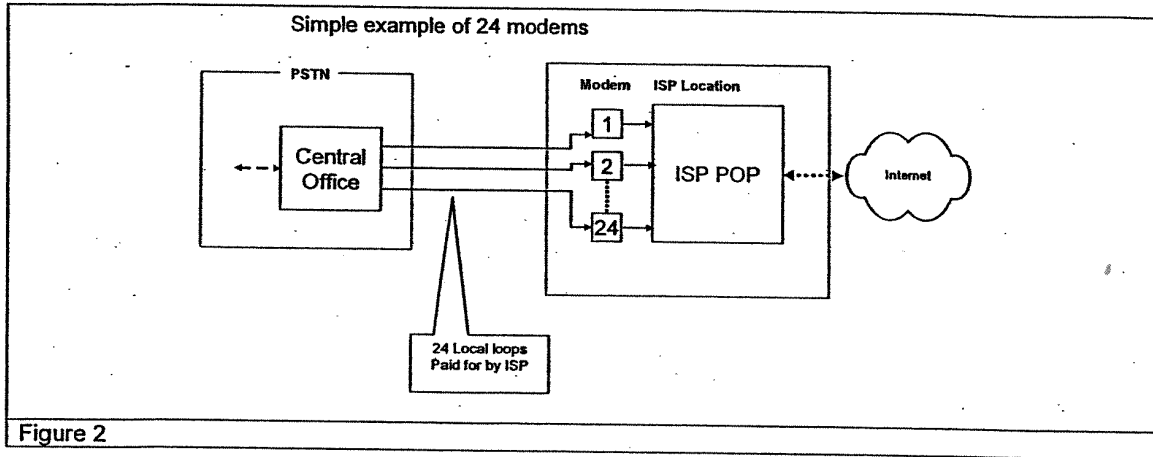


Figure 1

4. The dial-up customer is connected to the local telephone company by a local loop which is connected to their Central Office. The Central Office provides dial tone. The cost of this loop (and any associated taxes) is included in the dial-up service cost to the dial-up customer and paid by the dial-up customer.
5. The dial-up customer may dial any telephone number and (subject to any service restrictions) be connected to any other telephone in the world. The charges for such calls will be deemed local or toll and subject to Federal Excise Tax (also known as FET). In a traditional domestic telephone call, dial-up customer both the person placing the call and the person receiving the call pay Federal Excise Tax.
6. Any dial-up customer connected to the Public Switched Telecommunications Network (PSTN) can establish a telephone quality connection with a modem associated with the ISP. Telephone quality is required to interact with the dial-up customer's modem.

Tutorial on ISP Access

7. Therefore, as is undisputed in this case, the local loop associated dial-up access to the ISP is subject to FET and any calls charges are subject to FET because the calls are either Local or Toll. In general, these call charges are paid by the ISP. ISPs usually establish 800 type numbers for the convenience of customers who do not have local access to one of their phone numbers. The charges for these 800 type calls are paid for by the ISP. These charges are liable to FET as they are defined as either Local or Toll.
8. In practice, an ISP creates modem pools consisting of groups of 24 modems. In a simplistic arrangement (see Figure 2), such a pool would require 24 local loops (all of which attract FET).



Use of Channelized DS1

9. In practice, the ISP would order a Channelized DS1 which uses a single circuit to carry 24 voice calls (see figure 3). In general, a DS1 (and any associated multiplexors) is cheaper than 24 individual circuits.
10. When a voice channel in the public telephone system is converted to a digital representation, it normally requires 56 or 64 kbps. A channelized DS1 will carry 24 of these voice channels giving a composite speed of about 1.5 Mbps. DS1s can also be referred to as T1s. Within the telephone network 28 DS1s are combined to produce a DS3 circuit giving a composite speed of about 45 Mbps. In practice, there are many more levels of this hierarchy with speeds of up to 2,000 Mbps.

Tutorial on ISP Access

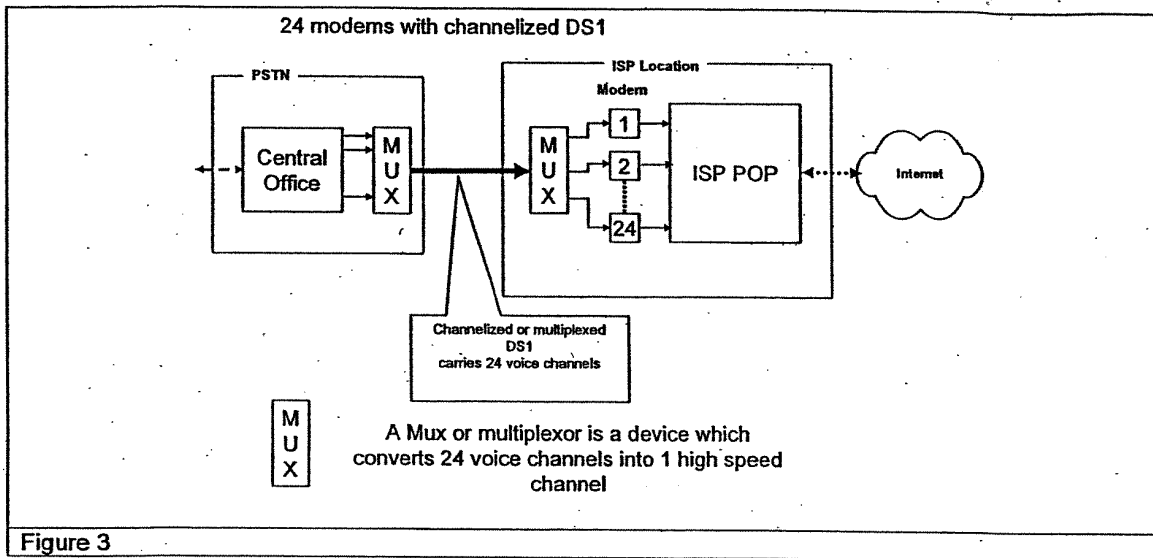


Figure 3

PRI (Primary rate interface)

11. In today's environment, most Central Offices use digital technology. In such a situation, the Central Office MUX on the Central Office end of the connection is not required as the Central Office already uses the digital representation of the voice signal (see Figure 4).
12. With digital technology Central Offices, local telephonic quality access between the Central Office and a modem pool will usually use what is called Primary Rate Interface (PRI). PRI uses a DS1 but provides only 23 voice channels. The signaling information that is contained in each of the 23 individual channels of a Channelized DS1 is concentrated into the 24th channel of a PRI.
13. It should be noted that PRIs are also used to provide telephonic quality access between the Local Exchange service and business switches (such as Private Branch Exchanges or PBXs and Call Centers).

Tutorial on ISP Access

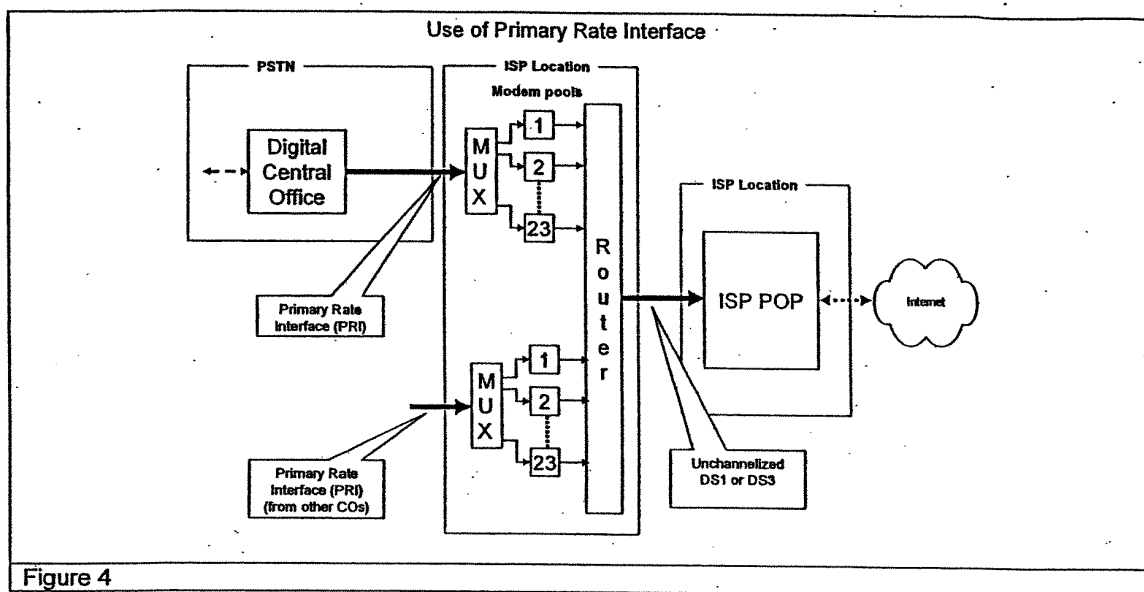


Figure 4

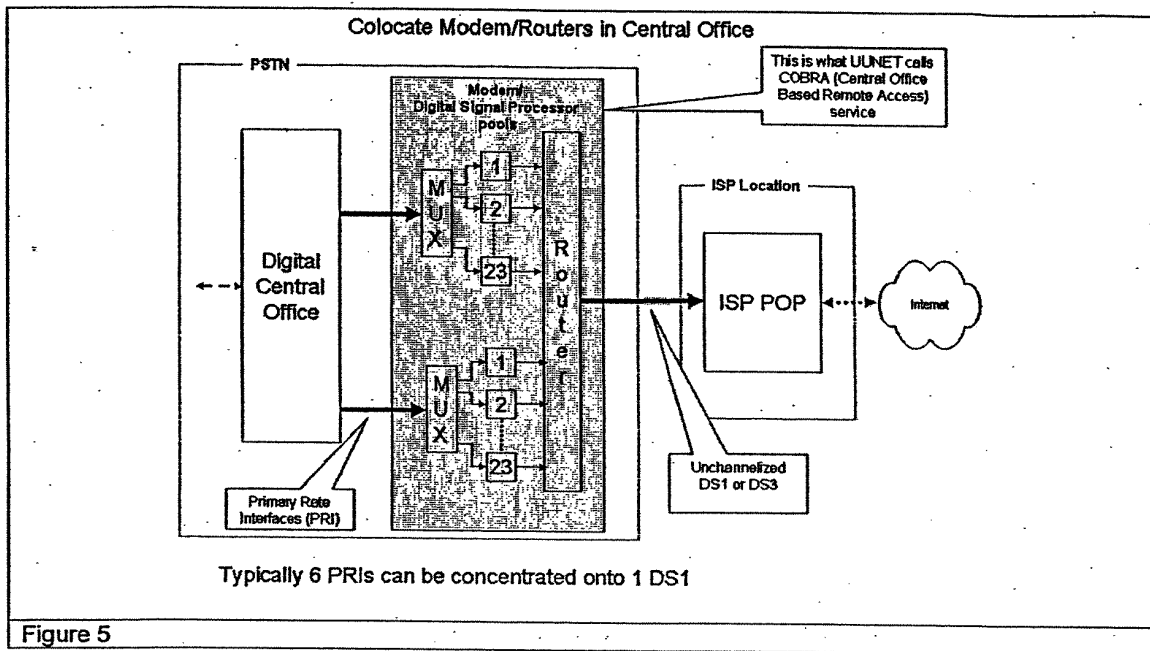
Application of Digital Signal Processors (DSP)

14. With PRI interfaces, the MUX/modems used at the ISP locations bear no resemblance to the dial-up customer's modems connected to their home computers. The PRI delivers a series of digital representations of the voice signals. Instead of converting these back to a voice signal for input to a traditional modem, the series of digital signals are input to a small special purpose computer (called a Digital Signal Processor or DSP) which contains a program to convert this series of digital representations to information to and from the internet.
15. In the PRI, there is one channel permanently assigned to each dial-up customer for the duration of the call. This means that capacity is wasted when the call is connected but there is no activity on the line. The unchannelized DS1 or DS3 uses what is known as packetized data. The Router collects information from the Modem or DSP into a packet of information. This packet is then transmitted to the ISP as needed. In the reverse direction, the Router receives a packet of information destined for a particular dial-up customer and dispenses it to that dial-up customer in telephonic quality voice format, either as modem tones or, with VoIP, as standard speech.

Colocation of ISP equipment in LEC Central Office

16. A further development used by UUNET, as well as other ISP vendors, is to colocate their equipment in the LEC Central Office. Colocation means UUNET and ISP locate their interface equipment in the same physical facility at the central office. Colocation has the major advantage that with typical dial-up internet customers, the traffic from 6 PRIs can be concentrated onto only one DS1. This reduces the capacity, and therefore cost, of the connections from the Central Offices to the ISPs POPs. This is shown in Figure 5. This is the basis of what UUNET calls COBRA (Central Office Based Remote Access) service.

Tutorial on ISP Access

**Use of these connections for Voice over IP (VoIP)**

17. VoIP describes a range of technologies whereby the Internet may be used to make telephone calls between internet subscribers (and between internet subscribers and users' regular telephones). The use of DSPs makes it practical to change the function of a DSP on a call by call basis. So one call may be for internet access and the next one on that same port may be for Voice over IP (VoIP). As discussed in my Declaration, the LECs and ISPs recognize this capability and include contractual language covering its possible use.

Michael Hills 9/2/05

Michael Hills, date

EXHIBIT F

Michael Hills Qualifications and Publications

President and founder of HTLT Telemanagement Ltd

1980 Founded HTLT Telemanagement Ltd. which specializes in traffic engineering, tariff based pricing and optimization of telecommunications networks.

1976 Consultant to Cable and Wireless plc (UK) in the USA

1966 to 1976 Lecturer/Senior Lecturer/Reader - Department of Electrical Engineering, University of Essex

1964 to 1966 Lecturer - Department of Electrical Engineering, Imperial College of London University

Received Bachelor of Science degree (First Class) in Physics (1962) and Ph.D. in Electrical Engineering (1969) from the Imperial College of London University.

Publications by Michael T. Hills, (in last ten years)

What If Access Charges Are Applied To IP-Originated Calls?
(May 2005 Business Communications Review)

Traffic Engineering for Voice over IP
(Sept 2002 Business Communications Review)

Voice Service: Confusion Growing, Prices Falling
(Feb 1999 Business Communications Review)

Waiting for the Tariff Revolution?
(Sep 1997, Business Communications Review)

Depositions and testimony on telecommunications matters (in last 10 years)

Expert witness for the federal government in XO Communications Inc .v. United States, Fed Cl.No 03-2754T

Exhibit C-1

Lucent Technologies
 Bell Labs Innovations


October 18, 2005

**John Anderson
MCI
2400 North Glenville
Richardson, Texas 75082**

Dear John:

You have recently inquired as to whether your Lucent MAX TNT platform has Voice over Internet Protocol (VoIP) capability. Our overview of this subject follows:

VoIP capability on the Lucent MAX TNT platform requires both the necessary hardware modules and specific software license keys enabling the VoIP functionality on a per chassis basis. For the Lucent MAX TNT platform, the following hardware modules are the ONLY hardware modules capable of supporting VoIP:

<u>Model</u>	<u>Comcode</u>	<u>Description</u>
TNT-SL-ADI-C	300076684	48-Port MultiDSP card
APX8-SL-96DSP	300164423	96-Port MultiDSP Card

The license keys required for VoIP functionality are obtained from Lucent and are based on the Serial number of the chassis Control Module. Each license key is only valid for that specific Serial Number. VoIP licensing status can be determined from the system's Command Line Interface and the value of the 'voip-enabled' parameter. The system must indicate 'voip-enabled = yes' to allow for any VoIP functionality.

Without either of the two above listed modules, and the VoIP licensing keys applied, the MAX TNT system is not capable of supporting VoIP.

During the lifetime of the Lucent MAX TNT platform, the following models of modem/HDLC hardware modules have been deployed. These hardware modules DO NOT support VoIP:

<u>Model</u>	<u>Comcode</u>	<u>Description</u>
TNT-SL-48MOD-S56	No Comcode	48 Port Modem, V.90, Series 56
TNT-SL-48MOD-SGL	300076429	48-Port Modem, V.90, Data Only
TNT-SL-48MOD-S-C	300076411	48-Port Modem, V.90, Data Only
TNT-SL-48MODV3-S-C	300076437	48-Port Modem, V.90, Data Only
TNT-SL-HA128	No Comcode	Hybrid HDLC Access Card
TNT-SL-HA192	No Comcode	Hybrid HDLC Access Card
TNT-SL-HDCL2	No Comcode	Hybrid HDLC Access Card

We hope the foregoing clarifies your understanding of the issue. If we can be of further assistance, please do not hesitate to contact the undersigned.

Best regards,

A handwritten signature in black ink, appearing to read "Donald Woods". The signature is written in a cursive, flowing style.

Donald Woods
Lucent Technical Sales
8000 Towers Crescent Drive, 4Th Flr
Vienna, VA 22182

CC:

J. Connelly

J. Olson

T. Lorenzen

Exhibit C-2